The surgical treatment of ischaemic heart disease is not yet established and many attempts to try and revascularize ischaemic areas have failed. However, progress is now being made and it is probable that a valuable operation will arise in the next few years. A reduction in the number of further attacks of infarction by modification of diet, such as a diet low in cholesterol, is not yet proved,

but weight reduction in the obese is logical and may improve residual pain on effort.

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CLINICAL SECTION

DYSGERMINOMA IN ASSOCIATION WITH EXFOLIATIVE DERMATITIS AND FEBRILE EPISODES

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Dysgerminomas are comparatively rare tumours but are probably commoner than granulosa cell tumours of the ovary. Their histology and varying malignancy are well known and their variable association with features of infantilism and abnormal hormonal output has been discussed in the literature. The case under review showed some unusual associated features.

Case Report

Jean C., a schoolgirl, aged 15½ years, was admitted at the request of her doctor who, while treating her for dermatitis, discovered a large abdominal swelling. Oedema of the legs had prompted abdominal palpation. The dermatitis had started three weeks prior to admission and the oedema had been present for one week.

Past history: Menstruation had commenced when the patient was aged 14 years and had been normal apart from two months' amenorrhoea when aged 15 years. The last period was two months before admission.

The girl was ill but normally developed. There was a severe generalized exfoliative dermatitis, oedema of the ankles and a solid tumour arising from the pelvis to 3 in. above the umbilicus. The temperature varied between 104° F. and 97° F.

during the first week. Apart from a sedimentation rate of 24 mm. in the hour, routine blood tests were negative.

Treatment at this stage was by intravenous thiosulphate and boracic ointment to sore areas. Progressive improvement of the skin lesions, apart from loss of hair, continued until the eighth week of hospitalization, when the first febrile episode occurred. It consisted of high fever (104° F.), vomiting, tachycardia, dyspnoea and cyanosis, fall of blood pressure and extreme prostration. After 24 hours these features disappeared. Three further similar episodes took place, five days, 12 days and six weeks later, the last one three weeks after laparotomy. During the third episode a temperature of 105° F. and a blood urea of 300 mgm. per cent. were recorded. Biochemical investigation on the blood, cerebrospinal fluid and urine during these episodes showed no abnormality.

Ten weeks after admission the skin and general condition had improved sufficiently to allow laparotomy. This revealed a left ovarian tumour and a small quantity of fluid in the peritoneal cavity. The right ovary, uterus and other abdominal organs appeared to be normal. The tumour was attached only by its pedicle and was easily removed. It was ovoid in shape and had an

FIG. 1.—Left ovarian tumour, associated with exfoliative dermatitis and febrile episodes.

intact capsule with small cystic bosses on its surface (Fig. 1). Its cut surface was fleshy with degenerate areas (Fig. 2). It weighed approximately 600 g. Histologically the tumour was a dysgerminoma (Fig. 3).

Progress following operation was normal apart from the febrile episode already mentioned. X-ray therapy was not considered advisable.

Because a combination of ovarian tumours and dermatomyositis had been observed, a skin and muscle biopsy was performed. The skin showed hyperkeratosis with scanty infiltration of lymphocytes and histiocytes in the superficial areas of the corium. The muscle was normal. Creatinine and creatinine excretion in the urine showed normal values, thus excluding dermatomyositis. Eight weeks after operation the patient was regaining her hair, a keloid scar was present and one period had just started.

Discussion

Whether there was any connection between the dysgerminoma and dermatitis and febrile attacks is a matter for speculation. Possibilities that come to mind are that the phenomena may be due to breakdown products from the tumour or to hormonal allergy. The isolated post-operative episode is against this. It is noteworthy that the tumour varied in size and consistency in relation to variations in the dermatitis. This impression may have been due to variations in the quality of overlying skin tissues or to actual change in the tumour itself.

No similar case was found in the literature studied.

We would like to express our thanks to S. H. Wass, Esq., M.S., F.R.C.S., under whose care the patient was admitted, for permission to publish this note, and to Dr. L. A. Lees for the photographs.

FIG. 2.—Cut surface of dysgerminoma, showing extensive areas of colloid degeneration and residue of the fleshy tumour substance.

FIG. 3.—Microphotograph of dysgerminoma, magnification 210.